Report Date: 02 Oct 2013

Summary Report for Individual Task
052-204-1121
Install High-Intensity Lights and Ballasts
Status: Approved

Condition: As a Power Line Distribution Specialist in a tactical or nontactical environment at a site needing illumination, you are given electrical construction prints, poles, mounting brackets, high-intensity lights, ballasts and wiring as specified in electrical construction prints, an electrician's tool kit, a voltage detector, applicable climbing and rigging equipment and/or a Bucket/Material Handler Truck, a multimeter, the applicable manufacturer's literature, wiring diagrams, the Lineman's and Cableman's Handbook (LCH), and the applicable personal protective equipment (PPE). This task should not be trained in MOPP.

Standard: Install high-intensity lights and ballasts on a pre-positioned pole to fully illuminate the designated area.

Special Condition: None

Safety Level: Low

MOPP: Never

Task Statements

Cue: None

DANGER

FOLLOW ALL ELECTRICAL SAFETY PRACTICES AND WEAR APPLICABLE PPE, AS REQUIRED. FAILURE TO COMPLY MAY CAUSE IMMEDIATE DEATH OR PERMANENT INJURY.

REMOVE ALL RINGS, NECKLACES, OTHER JEWELRY, AND LOOSE CLOTHING. FAILURE TO COMPLY MAY CAUSE IMMEDIATE DEATH OR PERMANENT INJURY.

A VOLTAGE DETECTION TESTER SHOULD BE USED TO ENSURE THAT THE CABLE IS NOT ENERGIZED. MATERIAL (SUCH AS A LEAD SHEATH THAT ACTS AS A SHIELD) MUST NOT BE BETWEEN THE TESTER AND THE CONDUCTORS OF THE CIRCUIT BEING TESTED. FAILURE TO TEST THE CABLES MAY CAUSE IMMEDIATE DEATH OR PERMANENT INJURY.

WARNING

ENSURE THAT YOU LIFT WITH YOUR LEGS. BE AWARE OF THE POSITION OF YOUR HANDS AND FINGERS AND WEAR EYE PROTECTION, IF NEEDED. FAILURE TO COMPLY MAY CAUSE IMMEDIATE PERSONAL INJURY OR DAMAGE TO EQUIPMENT.

CAUTION

None

Remarks: None

Notes: None

Performance Steps

1. Review the applicable manufacturer's literature, electrical construction prints, and wiring diagrams.

2. Perform switching, blocking and tagging procedures.

3. Ensure that personnel follow safety clearances.

4. Ascend the pole if necessary.

5. Install the mounting bracket on the pole.

6. Mount the lighting fixture and ballast onto the bracket.

7. Ensure that the mounted equipment is secured to the pole for safety purposes.

8. Install the distribution and control wiring.

9. Close out switching, blocking and tagging procedures by removing blocking and tagging devices.

10. Energize the circuit.

11. Verify that the lamp illuminates the designated area and adjust as necessary.

12. Ensure that the items listed in the conditions are properly cleaned and stored.

(Asterisks indicates a leader performance step.)

Evaluation Preparation: Provide the Soldier with all the items listed in the conditions. Give the Soldier a safety briefing before starting, and ensure that all safety precautions are followed. Prepare the area and equipment in advance to ensure that the task standards can be met.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Reviewed the applicable manufacturer's literature, electrical construction prints, and wiring diagrams.			
2. Performed switching, blocking and tagging procedures.			
3. Ensured that personnel followed safety clearances.			
4. Ascended the pole if necessary.			
5. Installed the mounting bracket on the pole.			
6. Mounted the lighting fixture and ballast onto the bracket.			
7. Ensured that the mounted equipment was secured to the pole for safety purposes.			
8. Installed the distribution and control wiring.			
9. Closed out switching, blocking ang tagging procedures by removing blocking and tagging devices.			
10. Energized the circuit.			
11. Verified that the lamp illuminated the designated area and adjusted as necessary.			
12. Ensured that the items listed in the conditions were properly cleaned and stored.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	AEH	American Electricians' Handbook, 14th Edition, McGraw Hill. 2002	No	No
	EM 385-1-1	Safety and Health Requirements.	No	No
	ER 385-1-31	Safety & Occupational Health. The Control of Hazardous Energy (Safe Clearance).	No	No
	FM 5-412	PROJECT MANAGEMENT	No	No
	LCH	The Lineman's and Cableman's Handbook, 11th Edition, McGraw-Hill. 2007	Yes	No
	NFPA 70®	National Electrical Code® (NEC®) Handbook. 2011 edition	No	No
	TM 3-34.86	Rigging Techniques, Procedures, and Applications {MCRP 3-17.7j}	No	No
	TM 5-682	Facilities Engineering: Electrical Facilities Safety.	No	No
	TM 5-684	Facilities Engineering - Electrical Exterior Facilities. NAVFAC MO-200/AFJMAN 32-1082.	No	No
	TM 5-811-1	Electric Power Supply and Distribution {AFJMAN 32-1080}	No	No
	TM 5-811-3	Electrical Design: Lightning and Static Electricity Protection. AFM 88-9, Chap 3.	No	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

For classroom instruction:
No major environmental impact, training entirely of an administrative or classroom nature, with little or no environmental impact on the environment, equipment or personnel. [32 CFR Part 651, Appendix B, Section II, (i)(2)]

For practical exercises and demonstrations:
Instructors should complete a risk assessment before conducting training, operations, or logistical activities. Risk assessments assist instructors in identifying potential environmental hazards, develops controls, make risk decisions, implement controls, and ensure proper supervision and evaluation. FM 3-100.4, Environmental Considerations in Military Operations.

Safety: In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, NBC Protection, FM 3-11.5, CBRN Decontamination.

Prerequisite Individual Tasks :

Task Number	Title	Proponent	Status
052-204-1115	Rescue an Injured Victim From a Manhole	052 - Engineer (Individual)	Approved
052-204-1203	Perform Operator Preventive-Maintenance Checks and Services (PMCS) on a Bucket/Material Handler Truck	052 - Engineer (Individual)	Reviewed
052-204-1125	Operate a Line Truck with Auxiliary Equipment	052 - Engineer (Individual)	Reviewed
052-204-1128	Interpret an Electrical One-Line Diagram	052 - Engineer (Individual)	Reviewed
052-204-1117	Inspect Hot-Line Equipment	052 - Engineer (Individual)	Reviewed
052-204-1114	Rescue an Injured Victim From a Utility Pole	052 - Engineer (Individual)	Reviewed
052-204-1124	Climb a Utility Pole	052 - Engineer (Individual)	Approved
052-204-1116	Rescue an Injured Victim From an Aerial-Bucket Truck	052 - Engineer (Individual)	Approved
052-204-1108	Inspect Safety Equipment	052 - Engineer (Individual)	Analysis Completed
052-204-1119	Perform Operator Preventive-Maintenance Checks and Services (PMCS) on a Line Truck With Auxiliary Equipment	052 - Engineer (Individual)	Reviewed
052-204-1113	Prepare a Manhole for Safe Entry	052 - Engineer (Individual)	Reviewed
052-204-1201	Maintain Climbing Equipment	052 - Engineer (Individual)	Reviewed
052-204-1212	Operate a Bucket/Material Handler Truck	052 - Engineer (Individual)	Analysis Completed
052-204-1204	Tie Rope Knots and Splices	052 - Engineer (Individual)	Analysis Completed

Supporting Individual Tasks :

Task Number	Title	Proponent	Status
052-204-1203	Perform Operator Preventive-Maintenance Checks and Services (PMCS) on a Bucket/Material Handler Truck	052 - Engineer (Individual)	Reviewed
052-204-1209	String Single Phase and Three Phase Overhead Conductors	052 - Engineer (Individual)	Analysis Completed
052-204-1213	Splice a Medium-Voltage URD Power Cable	052 - Engineer (Individual)	Approved
052-204-1214	Terminate a Medium-Voltage URD Power Cable	052 - Engineer (Individual)	Approved
052-204-2303	Perform Primary Voltage Live-Line Testing	052 - Engineer (Individual)	Analysis Completed
052-204-1117	Inspect Hot-Line Equipment	052 - Engineer (Individual)	Reviewed
052-204-1215	Splice a Medium-Voltage Overhead Power Cable	052 - Engineer (Individual)	Approved
052-204-1202	Maintain Rigging/Hoisting Equipment	052 - Engineer (Individual)	Reviewed
052-204-2301	Perform Switching, Blocking and Tagging Procedures	052 - Engineer (Individual)	Approved
052-204-2304	Perform Secondary Voltage Live-Line Testing	052 - Engineer (Individual)	Analysis Completed
052-204-1125	Operate a Line Truck with Auxiliary Equipment	052 - Engineer (Individual)	Reviewed
052-302-7104	Direct Installation of Theater of Operation (T/O) Electrical Equipment / Fixtures	052 - Engineer (Individual)	Approved
052-204-1116	Rescue an Injured Victim From an Aerial-Bucket Truck	052 - Engineer (Individual)	Approved

052-204-1127	Perform Groundman Duties	052 - Engineer (Individual)	Reviewed
052-204-2219	Supervise the Use of a Line Truck With Trailer to Load and Unload Utility Poles	052 - Engineer (Individual)	Approved
052-204-1212	Operate a Bucket/Material Handler Truck	052 - Engineer (Individual)	Analysis Completed
052-204-1204	Tie Rope Knots and Splices	052 - Engineer (Individual)	Analysis Completed

Supported Individual Tasks :

Task Number	Title	Proponent	Status
052-204-2308	Design an Overhead Electrical Distribution System	052 - Engineer (Individual)	Analysis Completed
052-204-1211	Install Distribution System Protection and Equipment (De-energized)	052 - Engineer (Individual)	Approved
052-204-2217	Manage a Power Line Crew	052 - Engineer (Individual)	Analysis Completed

Supported Collective Tasks :

Task Number	Title	Proponent	Status
05-3-5700	Created from Template: Install Nonstandard Low-Voltage, Electrical-Power Distribution Equipment	05 - Engineers (Collective)	Analysis
05-3-5731	Perform Electrical-Power, Distribution Equipment Organizational Maintenance Operations	05 - Engineers (Collective)	Approved
05-3-5700	Created from Template: Install Nonstandard Low-Voltage, Electrical-Power Distribution Equipment	05 - Engineers (Collective)	Analysis
05-3-5729	Operate Power Generation and Distribution Equipment	05 - Engineers (Collective)	Approved
05-3-5725	Install Aerial Electrical Power Distribution Equipment	05 - Engineers (Collective)	Approved
05-3-5701	Created from Template: Install Low-Voltage, Electrical-Power Distribution Equipment	05 - Engineers (Collective)	Analysis
05-3-5701	Install Low-Voltage, Electrical-Power Distribution Equipment	05 - Engineers (Collective)	Approved
05-3-5704	Perform Nonorganic Equipment Power Distribution Maintenance Operations	05 - Engineers (Collective)	Approved
05-3-5700	Install Nonstandard Low-Voltage, Electrical-Power Distribution Equipment	05 - Engineers (Collective)	Approved
05-3-5704	Created from Template: Perform Nonorganic Equipment Power Distribution Maintenance Operations	05 - Engineers (Collective)	Analysis

ICTL Data :

ICTL Title	Personnel Type	MOS Data
12Q10, Power Line Distribution Specialist, skill level 1	Enlisted	MOS: 12Q, Skill Level: SL1